## **Amendments to the Specification:**

1. Page 1, before line 4 but after the title, please insert the following:

# **CROSS-REFERENCE TO RELATED APPLICATIONS**

The present application is a U.S. National Stage of International Application No. PCT/EP2004/007627, filed July 10, 2004, which claims priority of German Patent Application No. 103 41 663.3, filed September 8, 2003.

#### **BACKGROUND OF THE INVENTION**

- 1. Field of the Invention
- 2. Page 1, before line 12, please insert the following:
- 2. <u>Discussion of Background Information</u>
- 3. Please delete the two paragraphs at page 12, lines 11 to 18.
- 4. Page 12, before line 20, please insert the following:

# SUMMARY OF THE INVENTION

The present invention provides a composition of matter which is suitable for use on skin or hair. The composition comprises one or more compounds of formula A and at least one additional component or element:

wherein

- R1, R2 and R5 are independently selected from hydrogen, methyl, ethyl, propyl, isopropyl, butyl, tert-butyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxy and carboxylic acid alkyl esters having alkyl radicals selected from methyl, ethyl, propyl and butyl,

Α

- R3 is selected from groups of formula (I)

#### wherein

- R6 and R7 are independently selected from hydrogen, methyl, ethyl, propyl, isopropyl, butyl, tert-butyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxy and carboxylic acid alkyl esters having alkyl radicals selected from methyl, ethyl, propyl and butyl,
- R4 is selected from
  - carbonyl oxygen,
  - amino acid radicals Ala, Ser, Gly, Val, Leu, Ile, Pro, Trp, Phe, Met Tyr,
    Thr, Cys, Asn, Asp, Glu, Lys, Arg, Gln, H, Orn, Sar, Hyl, Hyp, Hse or Hcy,

- radicals of formulae N-OH, N-(CH<sub>2</sub>)<sub>x</sub>-OH, N-(CHR9)<sub>x</sub>-CH<sub>2</sub>OH,
   N-(CHR9)<sub>x</sub>-OH, N-(CH<sub>2</sub>)<sub>x</sub>-OCOMe, where x = 1-10, and
- radicals of formulae

$$R11$$
 $N COR_{10}$ 
 $N O$ 
and
$$R11$$

- R9 is independently selected from hydrogen and hydroxy,
- R11 is selected from hydrogen, methyl, ethyl, propyl, prop-2-yl, butyl, isobutyl, but-2-yl, hydroxymethyl, 1-hydroxyethyl, pyrrolidine-1,2-diyl, 1H-indol-3-ylmethyl, benzyl, 2-(methylthio)ethyl, 4-hydroxybenzyl, mercaptomethyl, 2-amino-2-oxoethyl, carboxymethyl, carboxyethyl, 4-aminobutyl, 3-{[amino(imino)methyl]-amino}propyl, 3-amino-3-oxopropyl, N-Me, 3-aminopropyl, 1H-imidazol-4-ylmethyl, 4-amino-3-hydroxybutyl, 4-hydroxypyrrolidine-1,2-diyl, hydroxyethyl, and 2-mercaptoethyl,
- R10 is selected from hydroxy, peptidically N-linked amino acid radicals selected from Ala, Ser, Gly, Val, Leu, Ile, Pro, Trp, Phe, Met Tyr, Thr, Cys, Asn, Asp, Glu, Lys, Arg, Gln, H, Orn, Sar, Hyl, Hyp, Hse or Hcy, radicals of formula

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where b = 1-6, or

R12 is selected from mono- and polysaccharides.

Excluded are compositions which comprise one or more of the following compounds as the only compound or compounds of formula A:

# (a) 9-retinal of formula

# (b) retinal derivatives of formula

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where Ra and Rb are independently selected from alkyl and alkoxy groups; and

## (c) 9-retinal alkanolamine Schiff's base of formula

where  $R = R'(OH)_n$  branched or unbranched alkanols, with  $R' = C_{1-20}$  hydrocarbon radical and n = 1 - 5.

In one aspect, the composition may be capable of increasing the tanning of the skin and/or the melanin synthesis in the skin and/or the hair.

In another aspect, the composition may comprise a cosmetic preparation, a dermatological preparation, a polymer matrix, a skin covering, a wound covering, a bandage, a wipe, a pad, a spray or a textile. For example, the composition may be a cosmetic preparation or a dermatological preparation.

In yet another aspect of the composition of matter of the present invention, one or more of R1, R2, R5, R6, and R7 may be methyl radicals and/or R4 may be selected from Ala, Ser or Gly.

In another aspect of the composition of matter according to the present invention, the composition may comprise one or more of the following compounds: *N*-3,7-dimethyl-9-(2,6,6-trimethylcyclohex-1-en-1-yl)nona-2,4,6,8-tetraen-1-ylidene]alanine, (1E,2E,4E,6E,8E)-3,7-dimethyl-9-(2,6,6-trimethylcyclohex-1-en-1-yl)nona-2,4,6,8-tetraenal oxime, 2-{[(1E,2E,4E,6E,8E)-3,7-dimethyl-9-(2,6,6-trimethyl-cyclohex-1-en-1-yl)nona-2,4,6,8-tetraen-1-ylidene]amino}ethanol, 1-{[(1E,2E,4E,6E,8E)-3,7-dimethyl-9-(2,6,6-trimethylcyclohex-1-en-1-yl)nona-2,4,6,8-tetraen-1-ylidene]amino}propane-1,2,3-triol, *N*-[(2E,4E,6E,8E)-3,7-dimethyl-9-(2,6,6-trimethylcyclohex-1-en-1-yl)nona-2,4,6,8-tetraen-1-ylidene]-L-alanine, *N*-[(2E,4E,6E,8E)-3,7-dimethyl-9-(2,6,6-trimethylcyclohex-1-en-1-yl)nona-2,4,6,8-tetraen-1-ylidene]-L-seryl-L-serine, acetyl-retinyliminoethanol. For example, the composition may comprise at least acetyl-retinyliminoethanol.

In another aspect, the composition of matter of the present invention may comprise from 0.0001% to 30% by weight of one or more compounds of formula A, for example, from 0.01% to 10% by weight or from 0.02% to 2% by weight, based on the total weight of the composition (preferably a cosmetic composition).

In a still further aspect, the composition of the present invention may comprise one or more compounds of formula A in encapsulated form. For example, the encapsulation material may comprise one or more of a collagen matrix, a cyclic oligosaccharide, alpha-, beta-, HP-beta-, random-Me-beta- and gamma-cyclodextrin, cellulose, gelatin, a wax matrix and liposomes.

In another aspect, the composition of the present invention may comprise a UVA filter and/or a UVB filter and/or an inorganic pigment (preferably comprising an inorganic micropigment), and/or the composition may comprise from 0.001% to 30% by weight of one or more antioxidants, e.g., from 0.05% to 20% by weight or from 0.1% to 10% by weight, based on the total weight of the composition (preferably a cosmetic composition).

In yet another aspect, the composition may comprise at least one component which is selected from preservatives, bactericides, perfumes, substances for preventing foaming, dyes, fillers, pigments which have a coloring effect, thickeners, wetting and/or humectant substances, fats, oils, waxes, alcohols, polyols, polymers, foam stabilizers, electrolytes, organic solvents, silicone derivatives, moisturizers, vitamins, proteins, photoprotective agents, stabilizers, insect repellents, water, salts, antimicrobially, proteolytically or keratolytically effective substances, medicaments, and other conventional components of a cosmetic or dermatological formulation.

In another aspect, the composition of the present invention may comprise from 0.05% to 30% by weight of glycerol, e.g., from 1% to 10% by weight, based on the total weight of the composition.

In a still further aspect, the composition of the present invention may comprise one or more components which are selected from active ingredients which have a positive effect on the condition of the skin, promoting agents for restructuring connective tissue, active ingredients for assisting skin functions in cases of dry skin, active ingredients for alleviating and/or positively influencing irritated skin states, inhibitors of prostaglandin metabolism, modulators of pigmentation, and active ingredients which bring about an enhanced or more rapid tanning of skin. In particular, the composition may comprise one or more of the following:

- active ingredients for positively influencing aging skin, in particular bioquinones such as, e.g., ubiquinone Q10, creatin, creatinin, carnitine, biotin, isoflavone, cardiolipin, lipoic acid, antifreezing proteins, hop extracts and hop-malt extracts,
- isoflavonoids as promoting agents for restructuring connective tissue,
- vitamin C, biotin, carnitine, creatin, propionic acid, green tea extracts, eucalyptus oil, urea and mineral salts, in particular NaCl, sea minerals and osmolytes as active ingredients for assisting skin functions in cases of dry skin,
- sericosides, extracts of licorice, licochalcones, in particular licochalcone A,
   silymarin, silyphos, dexpanthenol as active ingredients for alleviating
   and/or positively influencing irritated skin states,
- inhibitors of the cyclooxygenase and the leukotriene metabolism, in particular of 5-lipoxygenase or 5-lipoxygenase inhibitor proteins, FLAP,
- tyrosine sulfate, dioic acid (8-hexadecene-1,16-dicarboxylic acid, lipoic acid, lipoamide, various extracts of licorice, kojic acid, hydroquinone, arbutin, fruit acids, in particular alpha-hydroxy acids (AHAs), bearberry

(Uvae ursi), ursolic acid, ascorbic acid, green tea extracts, aminoguanidine, pyridoxamine as modulators of pigmentation, and/or

- Advanced Glycation End products (AGE), lipofuscins, nucleic acid oligonucleotides, purins, pyrimidines, NO-releasing substances as active ingredients which bring about enhanced or more rapid tanning of the skin.

In another aspect, the composition of the present invention may comprise an aqueous system and/or a surfactant preparation which is suitable for the cleansing or care of the skin and/or the hair.

In a still further aspect, the composition of the present invention may comprise a multiple emulsion, a microemulsion, a Pickering emulsion and/or a sprayable emulsion; and/or the composition may comprise a presun formulation, a sunscreen formulation and/or an aftersun formulation.

In yet another aspect, the composition of the present invention may be in a form which is suitable for topical application to the skin and/or the hair.

The present invention also provides a composition for application to the skin and/or to the hair, which composition is selected from one or more of a shower gel, a shampoo, a conditioner, a hair care treatment, a hair rinse, a hair tonic, a hair spray, a make-up composition, a skin protection cream, a face cream, a cleansing cream, a sunscreen cream, a nutrient cream, a day cream, a night

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cream, a gel, a lotion, and a cleansing preparation and comprises the

composition of matter of the present invention, including the various aspects

thereof as set forth above.

The present invention also provides a method of tanning the skin, a method of

caring for the skin, a method of protecting the skin and/or hair from harmful UV

rays, a method of increasing the synthesis of melanin in the skin, a method of

prolonging a brown coloration of the skin, a method of protecting the skin against

oxidative stress, a method of protecting the skin against chronological and photo-

induced skin aging, a method of intensifying the hair color, and a method of

preventing the graying of hair and/or protecting hair against sunlight-induced

bleaching. All of these methods comprise the application of the composition of

matter of the present invention, including the various aspects thereof as set forth

above, to the skin and/or to the hair.

DETAILED DESCRIPTION OF THE INVENTION

5. Page 59, line 1: Please replace "Claims" by "WHAT IS CLAIMED IS:"

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